

## In the Claims

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3 **1. (Currently Amended)** An apparatus for connecting a tone generator  
4 to a plurality of conductors in a communication line, said apparatus comprising:

5 an interconnect structure comprising:

6 a first plurality of leads comprising an electrically conductive  
7 portion having a first end and a second end, wherein the first plurality of leads are  
8 commonly electrically attached at the first end and wherein the first end is  
9 configured to electrically attach to a tone generator; and

10 a plurality of first electrical connection devices electrically attached  
11 to a plurality of corresponding leads of the first plurality of leads at the second  
12 end, a plurality of first electrical connection devices configured to engage a  
13 plurality of electrical conductors of a communication line to provide an electrical  
14 connection between the tone generator and a plurality of electrical conductors of  
15 the communication line, wherein the tone generator simultaneously distributes a  
16 tone signal across the plurality of leads and the plurality of electrical conductors of  
17 the communication line.

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19 **2. (Original)** The apparatus of claim 1, wherein the first end of the first  
20 plurality of leads further comprises a first pigtail conductor electrically attached to  
21 the first end of the plurality of leads.

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23 **3. (Original)** The apparatus of claim 2, wherein the first pigtail conductor  
24 is configured to electrically attach to the tone generator.  
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1           **4. (Original)** The apparatus of claim 3, wherein the first pigtail conductor  
2 further comprises a second electrical connection device for releasably attaching  
3 the second pigtail to the tone generator.

4           **5. (Original)** The apparatus of claim 1, wherein a plurality of first  
5 electrical connection devices are spring loaded clips for releasably attaching a  
6 plurality of leads of the first plurality of leads to a plurality of electrical conductors  
7 of the communication line.

8           **6. (Currently Amended)** ~~The apparatus of claim 1, further comprising:~~  
9           An apparatus for connecting a tone generator to a plurality of conductors in  
10 a communication line, said apparatus comprising:  
11 an interconnect structure comprising:

12                   a first plurality of leads comprising an electrically conductive  
13 portion having a first end and a second end, wherein the first plurality of leads are  
14 commonly electrically attached at the first end and wherein the first end is  
15 configured to electrically attach to a tone generator; and

16                   a plurality of first electrical connection devices electrically attached  
17 to a plurality of corresponding leads of the first plurality of leads at the second  
18 end, a plurality of first electrical connection devices configured to engage a  
19 plurality of electrical conductors of a communication line to provide an electrical  
20 connection between the tone generator and a plurality of electrical conductors of  
21 the communication line;  
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1 a second plurality of leads comprising an electrically conductive  
2 portion having a first end and a second end, wherein the second plurality of leads  
3 are commonly electrically attached at the first end and wherein the first end is  
4 configured to electrically attach to a tone generator; and

5 a plurality of third electrical connection devices electrically attached  
6 to a plurality of corresponding leads of the second plurality of leads at the second  
7 end, a plurality of third electrical connection devices configured to engage a  
8 plurality of electrical conductors of a communication line to provide an electrical  
9 connection between the tone generator and a plurality of electrical conductors of  
10 the communication line.

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12 **7. (Previously Presented)** The apparatus of claim 6, wherein the first end  
13 of the second plurality of leads further comprises a second pigtail conductor  
14 electrically attached to the first end of the first plurality of leads.

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16 **8. (Previously Presented)** The apparatus of claim 6, wherein the second  
17 pigtail conductor is configured to electrically attach to the tone generator.

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19 **9. (Previously Presented)** The apparatus of claim 8, wherein the second  
20 pigtail conductor further comprises a fourth electrical connection device for  
21 releasably attaching the second pigtail to the tone generator.

1           **10. (Original)** The apparatus of claim 1, wherein a plurality of fourth  
2 electrical connection devices are spring loaded clips for releasably attaching a  
3 plurality of leads of the second plurality of leads to a plurality of electrical  
4 conductors of the communication line.

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6           **11. (Original)** A system for testing a communication line including a  
7 plurality of electrical conductors, the system comprising:

8           a tone generator having a signal output terminal and a common return  
9 terminal; and

10           an interconnect structure electrically coupled to the tone generator, the  
11 interconnect structure comprising:

12           a first plurality of leads comprising a electrically conductive portion having  
13 a first end and a second end, wherein the first plurality of leads are commonly  
14 electrically attached at the first end and wherein the first end is configured to  
15 electrically attach to the signal output terminal of the tone generator; and

16           a plurality of first electrical connection devices electrically attached to a  
17 plurality of corresponding leads of the first plurality of leads at the second end, a  
18 plurality of first electrical connection devices configured to engage a plurality of  
19 electrical conductors of a communication line to provide an electrical connection  
20 between the tone generator and a plurality of electrical conductors of the  
21 communication line;

22           wherein a single output tone signal emitted by the tone generator is  
23 simultaneously distributed to a plurality of electrical conductors of the  
24 communication line.  
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1           **12. (Original)** The system of claim 11, wherein the first end of the first  
2 plurality of leads further comprises a first pigtail conductor electrically attached at  
3 one end to the first end of the plurality of leads and at the other end to the signal  
4 output terminal of the tone generator.

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6           **13. (Original)** The system of claim 12, wherein the first pigtail conductor  
7 is configured to electrically attach to the signal output terminal of the tone  
8 generator.

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10           **14. (Original)** The system of claim 13, wherein the first pigtail conductor  
11 further comprises a second electrical connection device for releasably attaching  
12 the second pigtail to the signal output terminal of the tone generator.

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14           **15. (Original)** The system of claim 11, wherein a plurality of first  
15 electrical connection devices are spring loaded clips for releasably attaching a  
16 plurality of leads of the first plurality of leads to a plurality of electrical conductors  
17 of the communication line.

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19           **16. (Currently Amended)** ~~The system of claim 11, further comprising:~~  
20           A system for testing a communication line including a plurality of electrical  
21 conductors, the system comprising:  
22           a tone generator having a signal output terminal and a common return  
23 terminal; and  
24           an interconnect structure electrically coupled to the tone generator, the  
25 interconnect structure comprising:

1        a first plurality of leads comprising an electrically conductive portion  
2        having a first end and a second end, wherein the first plurality of leads are  
3        commonly electrically attached at the first end and wherein the first end is  
4        configured to electrically attach to the signal output terminal of the tone generator;  
5        and

6        a plurality of first electrical connection devices electrically attached to a  
7        plurality of corresponding leads of the first plurality of leads at the second end, a  
8        plurality of first electrical connection devices configured to engage a plurality of  
9        electrical conductors of a communication line to provide an electrical connection  
10       between the tone generator and a plurality of electrical conductors of the  
11       communication line;

12       wherein a single output tone signal emitted by the tone generator is  
13       simultaneously distributed to a plurality of electrical conductors of the  
14       communication line;

15       a second plurality of leads comprising an electrically conductive portion  
16       having a first end and a second end, wherein the second plurality of leads are  
17       commonly electrically attached at the first end and wherein the first end is  
18       configured to electrically attach to the common return terminal of the tone  
19       generator; and

20       a plurality of third electrical connection devices electrically attached to a  
21       plurality of corresponding leads of the second plurality of leads at the second end,  
22       a plurality of third electrical connection devices configured to engage a plurality of  
23       electrical conductors of a communication line to provide an electrical connection  
24       between the tone generator and a plurality of electrical conductors of the  
25       communication line.

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2       **17. (Previously Presented)** The system of claim 16, wherein the first end  
3 of the second plurality of leads further comprises a second pigtail conductor  
4 electrically attached to the first end of the second plurality of leads.  
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6       **18. (Currently Amended)** The system of claim 16, wherein the second  
7 pigtail conductor is configured to electrically attach to the common return terminal  
8 of the tone generator.  
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10       **19. (Currently Amended)** The system of claim 18, wherein the second  
11 pigtail conductor further comprises a fourth electrical connection device for  
12 releasably attaching the second pigtail to the common return terminal of the tone  
13 generator.  
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15       **20. (Original)** The system of claim 11, wherein a plurality of fourth  
16 electrical connection devices are spring loaded clips for releasably attaching a  
17 plurality of leads of the second plurality of leads to a plurality of electrical  
18 conductors of the communication line.  
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